**Biology of Higher Plants**

**BIOL 2241 Fall 2025**

**GAB 112**

**Tu-Thurs 11-12:30**

**INSTRUCTOR: Dr. Ann Price**

**Office: Life Sci A 128D**

**Email:** [**Ann.Price@unt.edu**](mailto:Ann.Price@unt.edu) **or through Canvas**

**Office Hours: Mon: 12-1, Tues 12:30 – 1:30 or by appointment**

**Textbook:** Biology of Plants (2013), Peter Raven, Ray Evert, and Susan Eichhorn,

8th ed., WH Freeman and Company, ISBN 13: 978-1-4292-1961-7. Earlier Editions will also work. Students are expected to read the textbook and keep up with lectures. Additional material will be periodically made available through CANVAS.

**COURSE DESCRIPTION:**

Introduction to basic principles of form, function, ecology and evolution of plants, as well as modern topics related to plant adaptation in changing environments and the exploitation of plants by humans for improved quality of life in developing and developed countries.

**PREREQUISITES:** BIOL 1710, 1720, and 1760 or equivalent.

**COURSE STRUCTURE:**

This section of BIOL 2241 will utilize both face-to-face and online elements. Students must attend the face-to-face lecture meetings as assigned in the syllabus. Students must also complete online modules or activities by the stated deadlines. Online modules require that the student have access to a computer that has the minimum configuration and software needed to complete the course activities (on-campus computer labs are available for student use).

**WEBSITE:**

CANVAS (https://unt.instructure.com) is the official web portal to this course, and you are required to check it regularly. It will contain updates to the syllabus, PowerPoint files of lecture material, and other official communications as necessary.

**CLASS POLICIES:**

All students in the course are expected to know and follow these course policies:

**-**Attendance is required at all lecture meetings. Attendance will be taken in class. Makeup work will only be provided for University Excused Absences and must be arranged in advance. Students with medical absences must provide documentation within 1 week of the absence and will be reviewed on a case-by-case basis.

- Cell phones, pagers, and other electronic devices must be silenced during class meetings. If such a device should ring during lecture, the student must leave class immediately and will be considered absent for the remainder of the period (including any quizzes, graded activities, or exams given that day).

- Late work will not be accepted. Be sure you understand the due dates for all activities. Contact your instructor immediately and before the deadline if you encounter any technical problems. For exams, be in your seat 5 minutes prior to exam start time. At instructor’s discretion, students arriving late may not be allowed to take the exam. You may not leave the exam and come back in.

- Each student is expected to work independently on all assignments unless specifically instructed otherwise by the instructor. Academic dishonesty (cheating) will not be tolerated. Students found cheating may receive a “0” for the assignment and could be removed from the course and/or reported to the Dean of Students Office. I do occasionally offer short writing assignments for extra credit. These are to be your own work. Do not plagiarize, do not use AI. If you are determined to have done either of these, you will receive a zero on the assignment and be ineligible for extra credit for the remainder of the semester.

- iClicker. Engagement, participation and interaction are important elements of the learning process. To that end, we will be using iClicker, so each student must be registered to Reef and have a device (computer, smartphone or tablet) for polling responses for this course. Because iClicker is flexible across devices, you may participate by choosing one of the options below:

iClicker app: You may use your own smartphone or tablet by downloading the app available for iOS and Android

iClicker website – iclicker.com – for browser-based use

iClicker device

With any of these options, you will create an account with iClicker, select University of North Texas as your institution, and enter your EUID (your Canvas login ID) in the Student ID (optional) space.

To add the course to your iClicker list. Log in as needed and the course will appear in your personal list.

Click on the course and JOIN when we are in session. Connecting via wifi in UNT classrooms is highly recommended.

Your iClicker participation will be graded. If you miss class, you miss those questions. There is no makeup. (If you have extenuating circumstances, please notify me so that we may work together to ensure your success in learning the material.)

iClicker Academic Integrity: \*Please note that the misuse of iClicker will be considered a violation of proper student conduct and will be treated as cheating. For this class, iClicker is to be used as a learning tool by you in the classroom. Misuse would include submitting answers for a friend who is not in attendance in class, submitting answers when you are absent, having someone else submit answers for you when you are absent, or any other use of iClicker by which you are not submitting your own work in class.

**Disabilities Accommodation:**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940-565-4323.

**COURSE SYLLABUS/TENTATIVE SCHEDULE**

BIOL 2241 Biology of Higher Plants

|  |  |  |  |
| --- | --- | --- | --- |
| Week | Topic | | Chapter |
| 1 | Syllabus and Introduction | | 1 |
|  | Molecular Composition of Plant Cells | 2 | |
| 2 | The Plant Cell and the Cell Cycle | | 3 |
|  | Movement of substances Into and Out of a Cell | | 4 |
| 3 | Photosynthesis | | 7 |
|  |  | |  |
| 4 | Cellular Respiration | | 6 |
|  | Exam 1 | |  |
| 5 | Reproduction and seeds  Early Development of Plants | 8, 17, 18, 19, 20  22 | |
| 6 | Cell and Tissues | | 23 |
|  | Roots | | 24 |
| 7 | Shoots  Secondary Growth | | 25  26 |
| 8 | Exam 2 | |  |
|  | Regulating Growth | | 27 |
| 9 | External Factors | | 28 |
| 10 | Plant nutrition | | 29 |
|  |  | |  |
| 11 | Movement of Water | | 30 |
| 12 | Exam 3 | |  |
| 12 | Plants and People | | 21 |
| 13 | Recombinant DNA and Biotechnology | | 10 |
| 14 | Communities and Ecology | | 31, 32 |
|  |  | |  |
|  | Thanksgiving Break | |  |
| 15 | Finish up and Review | |  |
| **Tuesday Dec 9**  **10:30 – 12:30** | **Final Exam** | |  |

**GRADING:**

Your course grade will consist of the following elements:

20% Quizzes and Activities 100 points

20% Examination #1 (calculated from % correct out of 100 possible points) 100 points

20% Examination #2 (calculated from % correct out of 100 possible points) 100 points

20% Examination #3 (calculated from % correct out of 100 possible points) 100 points

20% Final Examination (calculated from % correct out of 100 possible points) 100 points

100% Overall % 500 points

**NOTE: If you miss less than three (3) days during the semester, you may drop your lowest test grade.**

Grade (Letter grades assigned: 90+=A, 80-89=B, 70-79=C, 60-69=D, <60=F)